1: Coon E-5 (1926-1927) 1931 MX3 Rif MX3

326 563 rings, and bracelets. Formerly they did not dare peddle their wares far from home, but sold them to Riffian hawkers who took them to the inland markets.

326 The third class of metal workers, the gunsmiths, is for the most part concentrated in Taghsuth, although native gunsmiths are found in many of the Riffian tribes. Most of the latter have learned their trade at Taghsuth or in Arab towns.

326 411 Tradition says that the Riffians first obtained metal pipes, suitable for use as musket barrels, in an archaeological deposit at Bades, and that these pipes were peddled all over the Rif. Later, when the pipes are said to have been exhausted, similar ones were obtained from Ceuta and the Peñon de Velez. The gunsmiths make all the other parts of the gun themselves: they bore the priming hole and make the lock, springs, trigger, pan, and the [531] hammer which holds the flint. The stock, which they make from local wood, they decorate with inlaid wire and with ivory, which is exceedingly rare and valuable. The flints, which are sold in all the markets, are made at Khebabs and by the Aaht Aziman of Beni Tuzin. [439] Many of the flints, however, are probably imported from England, as are some of the locks, which bear in many cases the royal insignia of Great Britain.

MANUFACTURE OF GUNPOWDER

389 The blending of gunpowder from its three ingredients, although carried on as a side occupation throughout the Rif, Senhaja, and Ghomara, was, before the Spanish occupation, the exclusive trade of one half of the Beni Mesduy. These craftsmen supplied the rest of the Rif with much of their explosive material, and since the consumption of gunpowder in the Rif, both as a festive gesture and for purposes of warfare, was tremendous, the craftsmen of Beni Mesduy were kept constantly busy supplying the demands made upon them.

[434] Of the three component elements, sulphur and saltpeter were imported and sold in all markets; charcoal was manufactured locally.

PREPARATION AND WORKING OF LEATHER

281 Tanning, practiced throughout the Rif, Senhaja, and Ghomara, is a process consisting of a long sequence of actions. The rawhide stripped from the animal is first rubbed with wet ashes, which are left on until the hair is ready to come off; it is then given a rubbing with crushed *taida* bark and water, which is allowed to stay on it for several days; crushed juniper berries are next rubbed into it, after which it is soaked in sour milk; it is then given another treatment with wet ashes, and is finally washed, often by being immersed in a stream.

[445 282] Leather so tanned is used in the manufacture of scrips, belts, parts of ploughs, covers to butter-jugs, amulet covers, and other objects. It is sewn, generally with strips of leather rather than with thread, by means of carpet needles imported from Fes and Melilla.

[386] Leather is colored by the same dyes and the same methods employed in the dyeing of textiles.

Leatherworking is at present concentrated in the tribe of Taghsuth, where cartridge belts and scrips of characteristic type are produced. (See plate 16.) These articles will be fully discussed under the subject of clothing.[1]

[1] See below, p. 81.

1: Coon E-5 (1926-1927) 1931 MX3 Rif MX3

of the bottom piece, set on edge. She does not coil it up over itself, but cuts it off, at the proper length, presses the ends together, and adds another strip to the top. When the pot has reached the required height she shapes it by means of a stick held inside and out, and by manipulation with her fingers. Handles and spouts are made separately and put on after the shaping has been finished. 323

The pot is then fired; while this is going on the women crush the ripe leaves of a wild bush called *bu b'kennin*, which resembles dogwood. From the leaves exudes a watery yellow juice. When they have taken out the pots, they paint them, still hot, with this juice, applying it with a stick, bit of straw, or rag, in geometric design, yellow on the buff of the clay. They then replace the pot in the kiln and rebake it. When it is taken out for the second time the design is black on buff, and gradually fades to sepia on buff. This pottery is found in Beni Urriaghel, Gaennaya, Beni Amart, Eastern Arabophone Senhaja, and Beni Mesduy. (See plates 23 and 24.) 1386 ● 3143

The wheel-made pottery manufactured by other tribes resembles the Arab pottery found all over the Arabic-speaking portions of Morocco, both in technique of manufacture and in shape. The vessels are generally cylindrical in form and white in color, without a slip; the wheel striations are plainly visible. Design is limited to a few squiggly lines running down the sides from the brim as the result of the fusion of a pigment put on the brim before firing. Distribution is in Ghomara, Western Arabophone Senhaja, Ktama, the Maritime tribes, Bokoya, Targuist, Temsaman, Beni Tuzin, Metalsa, Beni Said, Galiya, and Kebdana.

The shapely designs of the central Riffian ware, two-handled drinking pots with down-curving lips, shallow plates, spouted milk-jugs, and semi-globular bowls, are copied on the wheel in certain tribes adjacent to the central Riffian area. The design typical of the Rif is put on, a little too perfectly to be true, and the product sold in markets as Riffian pottery. This hybrid type is made, not as a survival of Riffian design in an area of recent adoption of the wheel, but as a definite attempt to imitate and to defraud. The wheel is reputed to have been used in the regions where it is now employed from the most remote times, and the diffusionistic tendency has been against rather than for its dissemination. Wheels have been abandoned in Targuist in favor of the cruder technique, and the same tendency is evident in Bokoya, Beni Tuzin, and Temsaman. Distribution: Bokoya, Tuzin, and Temsaman. 323 415

WOOD, SKIN, AND IRON CONTAINERS

Throughout the Rif wooden bowls are adzed out of tree-trunks. These bowls are of one piece, and round in shape. Another type of wooden container, used in serving *sekau* to a large company, is the same as an old-fashioned washtub, shaped like the bottom part of a barrel, and carried about by means of chain handles. Wooden containers, carved from one piece or put together in the manner of barrels, are the characteristic product of the tribes of the Senhaja Sghir, with the exception of Ktama. These tribes make no pottery, and have a greater abundance of wood than any other group. They utilise wooden vessels for every purpose which does not necessitate the use of fire. For the latter purpose they import pottery vessels from the Rif; but they have in recent years produced an undecorated imitation of them in Taghsuth. 415 322

Although the Metalsa make wheel-turned pottery, their equally nomadic neighbors, the Beni Bu Yahyi, neither make it nor employ it to any great extent. The Beni Bu Yahyi use 415

1: Coon E-5 (1926-1927) 1931 MX3 Rif MX3

286 spun from black goat hair is put in as a weft by hand, without a shuttle, as in the case of the *asta*. The result of this process, a heavy, hybrid fabric, half textile and half matting, is used for tents.

Rug-making has not reached the high development among the Riffians which it has attained among the Shluh and Braber. Riffian rugs, woven on the *asta*, are coarse, harsh, and unattractive. The hooked-rug method, employed so effectively by the Beni Mgil and Beni Mtir of the Braber, is unknown. In fact, few rugs are made by the Riffians, who prefer to purchase them at Melilla and Fez.

386 All wool intended to be used in garments other than turbans and belts is thrown into a vat of dye before being carded or spun. The dyes used for coloring this raw wool are as 314 follows:

brown, made from boiled apple-leaves.
red, made from the bark of almond-tree roots, boiled.
yellow, made from pomegranate husks.
green, made from the water boiled out of *thaghigheshth* roots or cedar cones.
black, made from an imported mineral called *zaj*.

386 These natural vegetable products are boiled in water, in which the wool is immersed and soaked. When it is taken out the colors are fast. Turbans and belts are dyed after they have been finished; when taken out of the dye they are rubbed with ashes, a process not considered necessary in the case of raw wool. Leather is dyed by exactly the same process as wool.

Tie-dyeing, called *thiſarsth*, is in some regions applied to cloth intended for use as turbans. The distribution is as follows: all Senhaja and Ghomara, and all tribes between them and Tangier.

CLOTHING

291 Riffian clothing was formerly made entirely of wool, locally sheared, spun, and woven.
177 At present many garments are made of imported cotton cloth, and others of silk. In this compilation of garment-types most attention will be paid to the older elements of Riffian dress, the distribution of which alone is significant.

[171] **Masculine Attire.** *ajjab*, the jellaba, is a woolen cloak with short sleeves and a hood. The jellaba is found all over North Africa and is not a distinctive Riffian garment, except as it differs in minor details from jellabas worn by other Berber or Arab groups. The Riffian jellaba is notably shorter than the average, reaching only to the knees, and its hood less broad than the hoods of the Ghomara and other western groups. The Riffian jellaba has definite shoulders; in the western type the transition from hood to sleeve is lacking. The Riffian jellaba is always either dark brown or black, but in other areas white, striped, or other colored types are worn. Furthermore, the Riffian jellaba can be readily distinguished by its embroidery, which will be treated separately. The jellaba is exclusivley a masculine garment. (See plates 25 and 27.)

[171] *er serham*, the silham, is a cloak resembling the jellaba, but lacks sleeves and is generally much longer and more flowing. The silham is typical of the Braber and Shluh of the Atlas, and is likewise worn by the nomadic peoples south of the Atlas. In the Rif its use is limited to the nomadic tribes of the Garet. Until recently the silham was worn by both the Metalsa